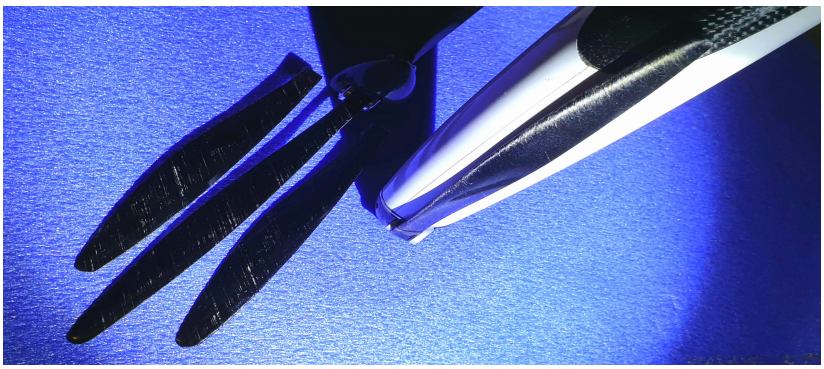
October 2021 – CN-models props / Xpower Windy

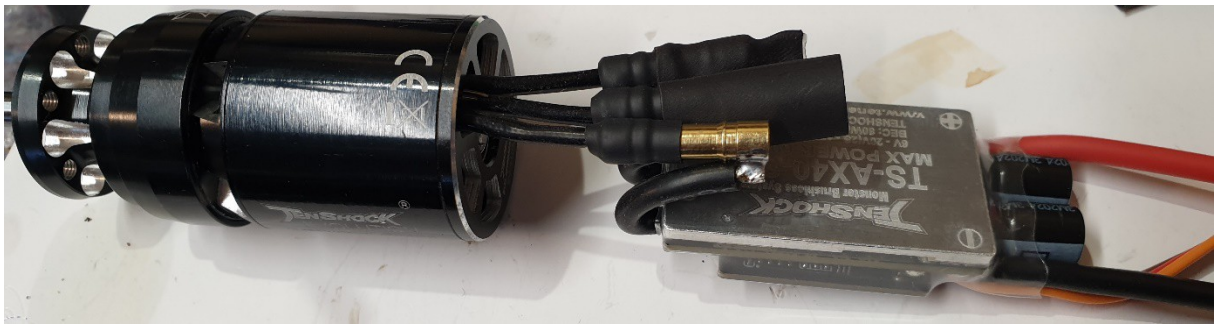
Long time since I have been testing props or motors. But it has also been a lot of competitions were I have used some of the combinations. For testing I am using SM-modellbau UniSense-E and Aerobtec Alti V4 with powersensor. This way I can bot see telemetry (and have max numbers) + have it logged on the Alti logger.
In September I received at a competition some CN-models props that they very much would like me to test. I also grabbed a Xpower Windy (F2926/8) motor that I was missing in my testing. It was out of stock I heard but Samba models had them in stock so one got to go home with me! The little brother (F2919/10) had some potential but was a bit hot if I pushed it with heavy model and all 30 seconds. This one has the same diameter and a bit heavier so should take the punishment of all kind of F5J flying (sometimes we need to go full speed 500m in front and 200m up in 10m/s winds with 2kg models).
So far I have done about 30 starts with the Xpower Windy with various props on 4cell and 3cell battery. It is not only one start but many with each and different batteries so that the numbers can be confirmed. For sure one needs to be careful with props as start up power can suddenly be very high if your esc is fast (I am using mostly a DYS40 drone controller with very fast startup and brake). Motor seems to be getting hot at around 55-60A so that is where I am trying to make further tests under.
The CN-models props seems to be good props and I espcially like that they are thin – narrow – and very stiff. Performance wise they seem to be in line with VM and GM though I need to test them a bit more on different motors and rpm. But so far they have showed interresting numbers. They also seems to fit many slim 30mm fuses with Hyperspinner. But also possible with GM spinners is possible (need to test more assemblies). They are designed for offset installation spinner.
So first impresssion is that for my use (all purpose F5J) both the Xpower windy and CN-models props seems to be very good choices. It must be said that I am always looking for drive combinations I can use on all models from FAI limit to max needed weight (apx 1100-2500g on 4m models). I have not yet tested heavy models with these props.
Lastly I did some tests with various Tenshock 1510A series, Tenshock 1515-15T and the Dualsky 3040-EG9 that is a good competitor to Xpower though better for 32mm fuses.
CN-model props I have tested now is 10x6, 11x8, 12x6, 13x9 and 14x10. You will find them in the excel sheet below with «CN» behind.
So far in testing props I can surely say that GM, VM and now CN-models is very competitive, strong, light and comes with spinners that fit their props very well. It also is nice that the quality is fantastic. I have yet to see a prop or spinner gets shattered in air or landing. Though I have destroyed a couple in handling but that is my mistake :-)

I will do more motortests and complete some more on prop/spinner fitting also on the Liberty model as that is slightly different to the Prestige. So keep looking!



January/February 2021 – Tenshock 1510A01-04

4 new motors and 2 controllers arrived. This is final version motors I think. They made the gear parts more solid and have winded a couple more versions (3550, 3950, 4650 and 5000kv). All have the same gear. The new controllers are 2-4 cell with a beefy 10A BEC. First impressions on logs is a very stable BEC voltage.
Both controllers (TS AX40) and motors (Tenshock 1510A01 to 04) have been tested a lot of flights and well above max what specifications said was max. They seem to be very robustly made and can cope with long endurance. I will open up the gears and check for damages at a later point but no noise changes have been heard during testing and no over heat or smell from windings have been observed. They are for sure good combinations. A new TS AX60-PRO is also released now for those that wants up to 6S / 1000watt setup.



Not many starts yet and temperature is low outside. So beware that there are some uncertainties as even when I heat the small batteries to 25-30 degrees they can be much lower before I manage to start the model. One could heat to 35-40Celcius and they do give more power this hot. But I try to not push them too far and instead try to show what we have in a normal summer day. I could do tests also with high temperature batteries but I have to draw the line somewhere on how many tests I do..

Some of the tests is done with 6S and 8S batteries as these motors can easily cope with the higher voltage with correct props. So beware the columns showing what battery/props is used.
These 6S/8S tests are not done with the Tenshock controller but a castle edge lite50 (Timing at 6degrees) and a Dualsky 6S controller. Now a new 6S/1000watt Tenshock is released that should be excellent for those bigger power setups.
Probably my motors will not be run much on more than 4S setups (4cells series) as testing have proven 4S is plenty power for F5J use or fun flying.

I have also included a new propeller that is made by Solidtec (design by Julian Benz and sold thru servorahmen.de). It is just called A1. Max rpm is 11000 and max 1900watt. Weight 6,6gr. Propeller is made from carbon fiber reinforced plastic by injection molding. It is an interesting material if mixed correctly. We know Solidtec is good at this from the servo frames they also produce. But care should be taken after landing hard as always. Landing tests have to wait for spring time as I have only snow and ice now □ □
The propeller seems to be performing well and I have done some tests with different motors (see excel sheet below). It also corresponds with the producers own tests. Small differences is probably battery temperature and battery type. Timing can also do differences.

May 2020 – Tenshock new motors

Sooo.. another update and why some of you might be interrested.

As many know I have been doing motor/prop/battery testing sincec winter. Not really scientific but good enough so I can be confident on my motor combos. I have off course no time or money to test all out there but a selection of what i have or got. This time the update is after I got some new Tenshock motors. http://www.tenshock.com/ts-gdm1510a-planetary-gear-drive-motor-4-75-1.html?fbclid=IwAR04m3GeYOlTKk_ScTHNVuT-ZFQCTjDzp1p0CxM9PjDAcc3ph7dsdTU74fw. They have made their own gears and two new motors specially designed for F5J 3 and 4 cell setups. Looking nice, good weights and a nice feature of motor front screw that means you will not destroy it by using too long screws. It also has so many holes that it will fit even if you have used 3 screw reisenauer before. Just make some new holes and one can switch back and forth.

The motors run very quiet and together with some quiet props you are almost stealth compared to some others ;-)

I dont think I have found the best setup yet as I have only reached 13m/s as best. But forward speed is decent for windy conditions (Reaching 5-600m forward in 5-6m/s wind). I might want to use the 3S motor with 4cell?.. Need to complete more props before I do that as it is more than it is spec'ed for.

On my motors there are some improvement points that I think they will adresse. They had forgotten to put some loctite on the gear case and I think the later produced shafts will be "D" connection. We pilots like very fast start and hard braking. That is hard on the gears..

So a small conclusion on these two Tenshock motors:

Quiet. Runs smooth and within specs they do not get too hot.
Design and fit is good. And it fits small fuses that had previously had other screw holes.
Performance could be better for heavier models. 2kg and launching to 200m far forward is ok but not more. Might be different view when/if I do more testing. Using more cells than spec might probably be good as rpm on gear is not at max (speced 70000rpm)

Assembly gears had some faults that they should have fixed on later deliveries (I got early birds).

March 2020

So time to release all my test results.. though I am far from finished 🙂

In F5J your means of start is a motor and 30seconds to use that. You want enough power for 30seconds but also some extra for practice and an hour of two flying. We dont want to getvas much altitude as possible because the lower we launch and fly 10min the better score we get. Over 200m we get extra penalty so to use the 30sec motortime properly is important. Last year I started to use some really small and powerful 4 cell batteries from Turnigy. They have been great and one can push them far even cold (some increase though heated)

Last year I used several different gear motors but I was fairly impressed by the cheap AXI 2217/12 v2 Long that gave me some good results in competitions even at 2100g flying weight on my Prestige 2PK (empty weight 1250g).

So I bought 2pcs of the brother 2220/12 long and upped the power to 4 cells after some messages from the producer this was possible (30A continious and 35A short term no issues). The reason for 2 was to use it over the limit and possibly burn it. It has not yet burned though it has been warm (upwards of 60A/30sec) Results have been good but also not so good deppending on propellers. So I ordered a lot of different propellers from different producers and also got my hands on some new smaller GM props (Georgi Mirov) https://www.gmpropellers.com/ he sent me for free. Result after many props is that this is a very nice and cheap alternative to a geared motor. No gear to break, 4 cells means temoerature of battery is not so important and the props are smaller = less drag.

Then a second motor came in that was interresting. Ivan Horejsi from https://horejsi.cz/ suggested sending me a Dualsky motor designed for our purpose for free.

Motor is outrunner but with case so there is no outside can turning and the motor wires out the back. Dualsky XM3040RG-9 was the cryptic name as part of a series newly developed motors from Dualsky http://www.dualsky.com/motor/67f3bf8a-9b1d-266d-41e6-8960fc50f8ee.shtml

First test was fantastic so I bought 2 more in the local hobby shop to also with these try and find the limit. With this motor I could also install a temperature probe on the case and monitor it thru the telemetry.

I also bought two pieces of the new Aerobtec power sensor so I could log amperage together with the Alti altimeter, This meant I had full control of initial power and thru the full climb phase of a typical F5J start.

So what am I looking for? Well most F5J starts end up in 100-150m and you know were to start searching. But sometimes the thermals are low and strong so you need to use the 30seconds to search in low altitude for 20sec with motor on 1/3 throttle or even lower. Then if you dont find it you might want to climb 100m the last seconds. That again means you want a fast and powerful climb for 5 seconds in worst case.

Another case might be the wind speed is high and you want to reach a treeline 500m in front. You then need to fly faster than the wind forward and also climb to whatever height you feel neccesary in those 30sec. Here an outrunner (or innrunner) with small prop have an advantage as it often runs on higher rpm with the same pitch as their geared counterparts.

The motor combo also needs to perform with full ballast and it would be nice if it is so light one consider it in the lightest models were you try to save every gram. Most tests

were done with 1650g windy Prestige with some tests full ballast and some speeding forward.

Looking at the results I put into an excel sheet I find extreme values both on AXI and Dualsky motor but I also want the motors to run for many seasons without service so it is always nice to take a step back. Motor effieciency also goes down when using a "too big prop" so sometimes it is no point in going bigger prop just for a few % better performance.

As a results of all this testing (>100 logs with many of the multiple climbs. many for double testing) I am happy to say both AXI2220/12 long and the Dualsky XM3040EG-9 perform well for F5J flying as I see it.

The Dualsky XM3040EG-9 have really performed the extra mile as it has never been above 34Celcius temperature on the outside and performs above 15m/s climb if you want.

All tests have been double checked with 30sec first climb and then extra climb(s) on same battery so that any heat build up will show and simulate summer conditions/worst case.

I am still waiting for some new propellers and spinners (VM and GM) to tweak and also to get the best aerodynamic nose. Flying F5J means flying a lot slow and also a lot sideways (sideslip) in the wind. So drag is important. More on that later.

So for propeller I am now currently "in love" with the new GM small series. Very little sound and it seems to outperform what I had available of props.

Gear:

- Plane is Samba Model, Prestige 2PK windy designed by Philip Kolb (1650g with F3J tips). 32mm nose cone (new 30mm nose just barely fits the Dualsky but needs sanding or cutting to 32mm)
- Battery: mostly Turnigy 4s650 75C and 3STattu R-line 4s850 95C
- Controller DYS40 mediumhigh timing for outrunners and Tenshock/Castle/Dualsky on geared motors
- BEC CC10A used for the DYS40
- Altimeter/powerlog Aerobtec nano and powersensor. For range test the Aerobtec GPS was used as extra logger.
- As a backup I read and log also most data on a Unisense-E from SM-modelbau
- Tx and telemetry JR XG11

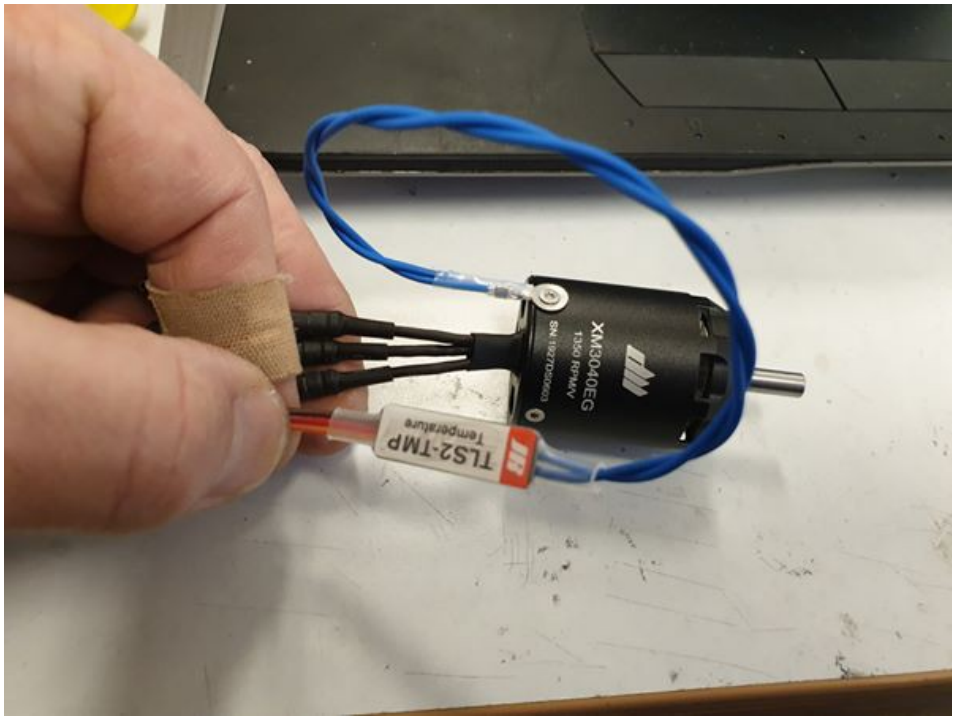
All results from my excel sheet here (pdf)
http://www.jojoen.no/div/2020testingmotor.pdf

Edit and disclaimer: to all of you following.. i am doing all these tests to find something that works for me in any condition with any weight in my models. Dont expect the exact results if you change something. An example of this is todays GM11x6 that uses around 50A on this Dualsky setup. But i also see that warmer battery makes higher amps. A bigger battery with same C will outperform the battery i use and that means you will draw even more and "might" be too much for the motor. A second climb almost always gives better climb because of heated battery. So I have tried to discard those but oftem perform them to check. I also might need to go thru the logs again to recheck. There might be things that went wrong (example one bad battery of the 12-15pcs I have)

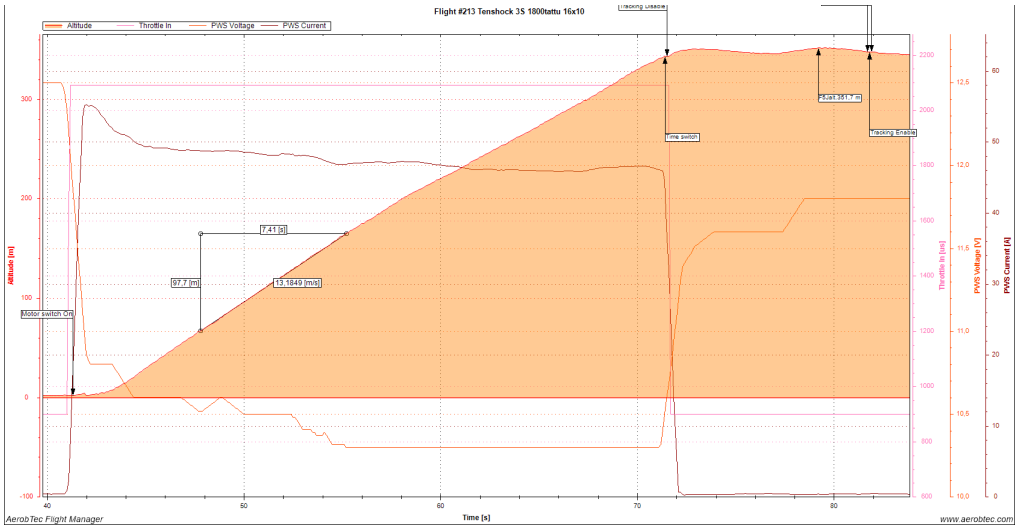
That is why my favourite is not the propeller that gives highest climb. It should also fit fuse for less drag and be a good setup in both cold and warm weather (warmer/colder batteries). And i want the setup to last many seasons.

These test have been performed without any sponsorship. I have had one motor and some props sent to me but I have bought most of it with own money. Though the testing have sparked producers sending me stuff i try to not get influenced in the testing.

Jo Grini




ZENFORCE
EVOLUTION
TG-MI-EVO1510GA01/4650KV


Flight #213 Tenshock 3S 1800tattu 16x10
Altitude
Throttle In
PWS Voltage
PWS Current
Tracking Disable
Time switch
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Tracking Enable
7,41 [s]
97,7 [m]
13,1849 [m/s]
Motor switch Off
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Throttle In [ms]
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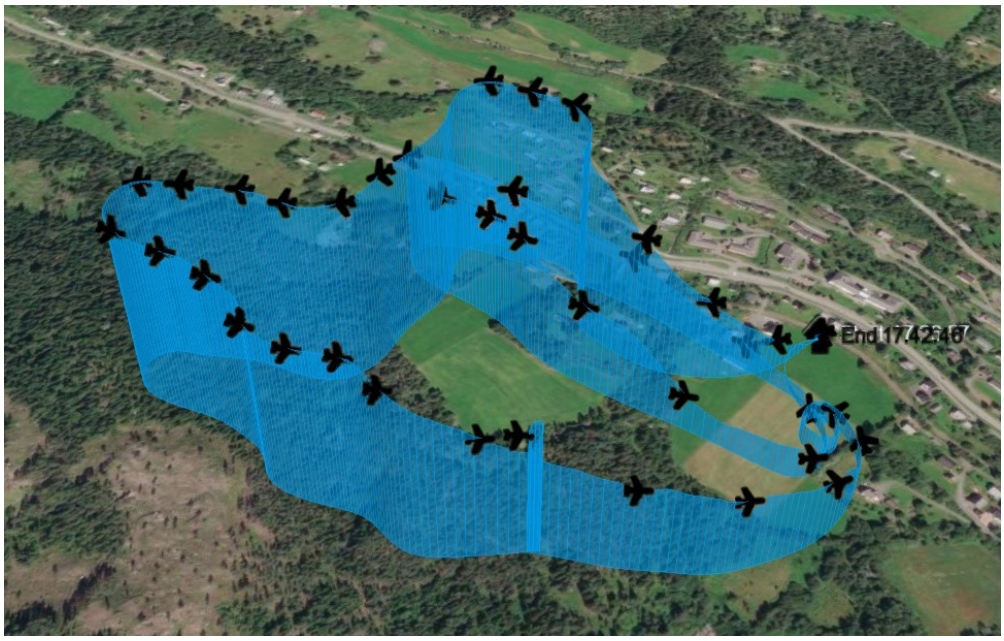
PWS Current [A]
Time [s]
AerobTec Flight Manager
www.aerobtec.com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Updated 05.12.2021 Use with caution. Many of the setups are on edge and care must be taken. All columns have an impact on a test. Hotter batteries or temp. outside WILL make a difference.

Testing 2020 and 2021:

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Sec. to 200m	Max m 30sek	Max climb m/s	Temp outsi	Temp moto	Temp batt	Altitude MASL	Weight modi	Zoom m
409	Dualsky XM3040EG-9	104g	1350	3s 850 95C	11x8 CN	64	52	52	15	392	13,5	C° 10		C° 25	450	1450	13
27	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	12x8 GM	48	43		15,0	377,0	13,5	C° 2		30	340	1650	12
412	Dualsky XM3040EG-9	104g	1350	3s 850 95C	12x6 CN	56	45	45	15	377	13,0	C° 10		C° 25	450	1450	10
248	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	12x8 GM				16,0	390,0	12,5	C° 0	<30	25	340	1650	8
275	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	12x8 VM				17,0	360,0	12,2	C° 8	<30	25	400	1650	13
275	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	11x7 VM	64	42		18,0	350,0	11,5	C° 8	<30	25	400	1650	12
243	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	11x6 GM	45	37		19,0	305,0	10,5	C° 5	<30	25	340	1650	10
33	Dualsky XM3040EG-9	104g	1350	**3S tattu 1800ma**	11x5 GM	46	38	30	19,0	304,0	10,5	C° 0	<30	25	340	1650	8
26	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	12x8 GM	45	40		22,0	261,0	9,5	C° 2		5	340	1650	8
452	Dualsky XM3040EG-9	104g	1350	3S Turnigy 650	10x6 GM	41	36	28	21	276	9,5	C° 10		C° 25	500	1500	8
244	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	11x6 CAM	48	38	35	23,0	250,0	9,0	C° 5	<30	25	340	1650	8
450	Dualsky XM3040EG-9	104g	1350	3s Turnigy 650	12x6 CN	47	40	35	22	261	9,0	C° 10		C° 25	500	1500	9
247	Dualsky XM3040EG-9	104g	1350	3S R-line 850 95(	10x6 GM				25,0	230,0	8,0	C° 0	<30	25	340	1650	8
410	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x8 CN	100	62		10	566	19,5	C° 10		C° 25	450	1450	18
429	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 GM C.L				10	566	19,5	C° 10		C° 25	500	1500	22
410	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x8 CN	100	62		10	566	19,5	C° 10		C° 25	450	1450	18
451	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	12x6 CN	59	54	51	10	566	19,5	C° 10		C° 25	500	1500	20
430	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 GM C.L				11	537	18,5	C° 10		C° 25	500	1500	21
453	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 GM C.L	62	51	43	11	537	18,5	C° 10		20	500	1500	20
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234/2	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6 GM	65	52		12,0		16,5	-C° 4	<30	35	340	1650	20
238	Dualsky XM3040EG-9	104g	1350	4S Hyperion 850	11x6 GM	65	52		13,0		15,5	C° 0		25	340	1650	20
273	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x7 VM	74	53		13,0		15,5	C° 8	<30	25	400	1650	16
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6,5 RF	60	53		13,0		15,2	C° 2		25		1650	
454	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x5 GM	51	40,0	33,0	14	421	14,5	C° 10		20	500	1500	16
234	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6 GM	60	49		14,0		14,0	-C° 4	<30	25	340	1650	20
235	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6 GM	58	49		14,0		14,0	-C° 4	<30	25	340	**2100**	15
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6,5 RF	65	48	43	17,0		13,7	C° 10	34C	20		1650	
246	Dualsky XM3040EG-9	104g	1350	4S Hyperion 850	10x6 GM				15,0	400,0	13,5	C° 0	<30	25	340	1650	8
45	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 GM	56	46		15,0	391,0	13,5	C° 6		30	340	1650	16
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 CAM	46	40		16,0	375,0	13,0	C° 5		25		1650	
237	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x6 GM	57	50		15,5		13,0	C° 0		25	340	1650	24
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	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 RF	50	41		16,0	370,0	12,6	C° 2		25		1650	
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 RF	50	37	34	19,0	355,0	12,6	C° 10	31C	20		1650	
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 RF	50	40		19,0	355,0	12,6	C° 5		25	100	1650	
230	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 RF	50	40				12,6	C° 5		25	50	1650	
44	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x5 GM	46	38		16,0	362,0	12,5	C° 6		30	340	1650	10
227	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 CAM				18,0		12,3	C° 5	<30	25	350	1650	
231	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x6 RF	50	41		16,0		12,3	C° 5		25	50	1650	
233	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 GM	45	37	36	17,0	355,0	12,0	-C° 4	<30	25	340	1650	15
226	Dualsky XM3040EG-9	104g	1350	4s Hyperion	10x6 CAM	45	39				11,8	C° 5	<30	25	350	1650	
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 VITA	60	41	40	21,0	320,0	11,5	C° 10	<30C	20		1650	
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 CAM	45	37		16-19		11,5	C° 5		5	100	1650	
31	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	11x5 GM	42	36	33	18,0	340,0	11,5	C° 0	<30	25	340	1650	15
46	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	10x5 GM	42	37		17,0	333,0	11,5	C° 6		30	340	1650	7
228	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 CAM	42	37		18,0		10,7	C° 5	<30	15	50	1650	
	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	9x6 VITA	52	44		22,0	295,0	9,5	C° 2		25		1650	

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Sec. to 200m	Max m 30sek	Max climb m/s	Temp outsi	Temp moto	Temp batt	Altitude MASL	Weight modi	Zoom m
2	Xpower F2919/10	83	1480	3S R-line 850 95(	VM12x8	60	48		15,0	377,0	13,0	C° 5	hot?	25	400	**1250**	7
3	Xpower F2919/10	83	1480	3S R-line 850 95(	VM11x7	47	38		17,0	335,0	12,0	C° 5		25	400	**1250**	12
283	Xpower F2919/10	83	1480	3S R-line 850 95(	VM12x8	70	48		20,0	295,0	10,3	C° 5	>50	20	450	1650	8
282	Xpower F2919/10	83	1480	3S R-line 850 95(	VM11x7	57	39		20,0	290,0	10,0	C° 5		20	450	1650	6
279	Xpower F2919/10	83	1480	3S R-line 850 95(	GM11x6	61	35		22,0	275,0	9,5	C° 5		20	450	1650	7
148_v4	Xpower F2919/10	83	1480	3S R-line 850 95(	VM11x7	53	42		22,0	261,0	9,0	C° 2		25	400	1650	4
277	Xpower F2919/10	83	1480	3S R-line 850 95(	GM9x6	40	28		26,0	230,0	8,0	C° 5		20	450	1650	6
48	Xpower F2919/10	83	1480	4S CNHL 1100ma	VM11x7	72	58	6sec only	Too much?	Too much?	20,0	C° 6		30	340	**1300**	25
50	Xpower F2919/10	83	1480	4S CNHL 1100ma	RF11x6.5	78	60	6sec only	Too much?	Too much?	19,5	C° 6		30	340	**1300**	19
41	Xpower F2919/10	83	1480	4S CNHL 1100ma	VM11x7	80	60	6sec only	Too much?	Too much?	19,0	C° 6		30	340	**1300**	20
49	Xpower F2919/10	83	1480	4S CNHL 1100ma	GM11x6	65	56	6sec only	Too much?	Too much?	18,0	C° 6		30	340	**1300**	27
51	Xpower F2919/10	83	1480	4S CNHL 1100ma	GM11x5	58	48		11	508	17,5	C° 6		30	340	**1300**	16
146_v4	Xpower F2919/10	83	1480	4S Turnigy 650	VM11x7	64	50		17,0	353,0	12,0	C° 2		25	400	1650	12
139_v4	Xpower F2919/10	83	1480	4S Turnigy 650	GM11x6	45	37		20,0	295,0	10,2	C° 2	35	25	400	1650	7
143_v4	Xpower F2919/10	83	1480	4S Turnigy 650	RF10x6	38	33		21,0	275,0	9,5	C° 2		25	400	1650	8
284	Xpower F2919/10	83	1480	4S Turnigy 650	GM9x6	40	28		23,0	260,0	9,0	C° 5		20	450	1650	6
	Xpower F2919/10	83	1480	4S Turnigy 650	GM9x5	ot tested yet										1650	
	Xpower F2919/10	83	1480	4S Turnigy 650	GM10x5	ot tested yet										1650	
	Xpower F2919/10	83	1480	4S Turnigy 650	GM11x5	ot tested yet										1650	
	Xpower F2919/10	83	1480	4S Turnigy 650	RF11x6.5	ot tested yet										1650	
391	Xpower 2925/8 windy	102g	1380	3S 1300 25C	13x9 CN	63	58		11	551	19,0	C° 10	Hot	C° 20	450	1500	5
395	Xpower 2925/8 windy	102g	1380	3S 1300 25C	11x8 CN	62	49	43	17	348	12,0	C° 10		C° 30	450	1500	12
397	Xpower 2925/8 windy	102g	1380	3S 1300 25C	13x9 CN	65	55	retesting	17	348	12,0	C° 10	Hot	C° 25	450	1500	10
400	Xpower 2925/8 windy	102g	1380	3s 1800	12x8 GM	66	60		15	392	13,5	C° 10		C° 20	450	1500	10
403	Xpower 2925/8 windy	102g	1380	3s 1800	12x6 CN	58	50		16	363	12,5	C° 10		C° 20	450	1500	10
390	Xpower 2925/8 windy	102g	1380	3s 850 95C	13x9 CN	63	58		11	551	19,0	C° 10	Hot	C° 20	450	1500	7
394	Xpower 2925/8 windy	102g	1380	3s 850 95C	11x8 CN	63	50	43	15	377	13,0	C° 10		C° 30	450	1500	13
396	Xpower 2925/8 windy	102g	1380	3s 850 95C	13x9 CN	90	60	retesting	15	377	13,0	C° 10	Hot	C° 25	450	1500	13
398	Xpower 2925/8 windy	102g	1380	3s 850 95C	12x6 CN	59	50		15	377	13,0	C° 10		C° 20	450	1500	11
399	Xpower 2925/8 windy	102g	1380	3s 850 95C	12x8 GM	65	58		17	348	12,0	C° 10		C° 20	450	1500	9
407	Xpower 2925/8 windy	102g	1380	3s 850 95C	11x6 GM	50	42		18	319	11,0	C° 10		C° 20	450	1500	7
411	Xpower 2925/8 windy	102g	1380	3s 850 95C	11x6 GM	50	42	40	18	319	11,0	C° 10		C° 25	450	1450	9
414	Xpower 2925/8 windy	102g	1380	3s 850 95C	10x6 GM	44	38	35	20	290	10,0	C° 10		C° 25	450	1450	7
415	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	10x6 GM	64	57	52	12	493	17,0	C° 10		C° 25	450	1450	17
380	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	11x8 CN	64	55	50	12	464	16,0	C° 10		C° 25	500	1500	12
386	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	13x8 GM	85	65	56	13	450	15,5	C° 10	Hot	C° 25	500	1500	13
381	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	11x7 VM	58	50	50	13	435	15,0	C° 10		C° 25	500	1500	18
382	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	11x5 GM	54	47	44	13	435	15,0	C° 10		C° 25	500	1500	12
383	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	12x6 CN	64	55	50	13	435	15,0	C° 10		C° 25	500	1500	14
384	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	12x6 CN	62	52	50	13	435	15,0	C° 10		C° 25	500	1500	12
385	Xpower 2925/8 windy	102g	1380	4S Turnigy 650	12x8 GM	80	60	55	14	406	14,0	C° 10	Hot	C° 25	500	1500	10

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Sec. to 200m	Max m 30sek	Max climb m/s	Temp outsi	Temp moto	Temp batt	Altitude MASL	Weight modi	Zoom m
213	Tenshock 1510A01	107	4650	3S Tattu 1800	GM16x10	54	46		15,0	377,0	13,0	C° 20		25	500	1700	8
208	Tenshock 1510A01	107	4650	3S Tattu 1800	GM14x10F	50	41		18,0	348,0	12,0	C° 20		25	500	1700	12
91	Tenshock 1510A01	107	4650	3S R-line 850	14x10 comp	46	39		19,0	305,0	10,5					1650	
92	Tenshock 1510A01	107	4650	3S R-line 850	14x10 comp	44	38		19,0	305,0	10,5	C° 10		20	100	1650	8
211	Tenshock 1510A01	107	4650	3S Tattu 1800	GM16x8	46	37		20,0	300,0	10,5	C° 20		25	500	1700	10
417	Tenshock 1510A01	107	4650	3s 850 95C	13x9 CN	35	34	26	20	290	10,0	C° 10		C° 25	450	1450	8
417	Tenshock 1510A01	107	4650	3s 850 95C	13x9 CN	35	34	26	20	290	10,0	C° 10		C° 25	450	1450	8
207	Tenshock 1510A01	107	4650	3S Tatuu 1800	GM13x10				21,0	164,0	9,5						

210	Tenshock 1510A01	107	4650	3S Tattu 1800	GM15x8	45	38		21,0	260,0	9,0	C° 20		25	500	1700	6
422	Tenshock 1510A01	107	4650	3s 850 95C	11x8 CN	28	25	23	25	232	8,0	C° 10		C° 25	450	1450	5
422	Tenshock 1510A01	107g	4650	3s 850 95C	11x8 CN	28	25	23	25	232	8,0	C° 10		C° 25	450	1450	5
434	Tenshock 1510A01	107g	4650	3s Turnigy 650	14x10 CN				25	232	8,0	C° 10		C° 25	500	1500	8
419	Tenshock 1510A01	107	4650	3s 850 95C	12x6 CN	23	20	17	33	174	6,0	C° 10		C° 25	450	1450	6
419	Tenshock 1510A01	107g	4650	3s 850 95C	12x6 CN	23	20	17	33	174	6,0	C° 10		C° 25	450	1450	6
215	Tenshock 1510A02	107	3550	3S tattu 2300	GM16x10	30	27	28	18	330	11	-C° 13		25	450	1300	6
54	Tenshock 1510A03	107	3950	3S 1300 CNHL	VM12x8	25	22		36	159	5,5	-C° 2		15	450	1800	3
222	Tenshock 1510A04	107	5000	3S R-line 850	Solidtec 1A	55	41		13	464	16	-C° 13		25	450	**1250**	11
416	Tenshock 1510A01	107	4650	4S Turnigy 650	13x9 CN	48	41	38	13	435	15,0	C° 10		C° 25	450	1450	15
421	Tenshock 1510A01	107	4650	4S Turnigy 650	11x8 CN	39	35	32	13	435	15,0	C° 10		C° 25	450	1450	8
116	Tenshock 1510A01	107	4650	4S Turnigy 650	GM12x8	48	40	35	14,0	406,0	14,0	C° 20		25	800	1700	10
119	Tenshock 1510A01	107	4650	4S Turnigy 650	VM12x8	44	38	34	14,0	406,0	14,0	C° 20		25	800	1700	14
117	Tenshock 1510A01	107	4650	4S Turnigy 650	GM12x8	47	40	30	15,0	391,0	13,5	C° 20		25	800	1700	11
418	Tenshock 1510A01	107	4650	4S Turnigy 650	12x6 CN	34	29	23	17	334	11,5	C° 10		C° 25	450	1450	13
118	Tenshock 1510A01	107	4650	4S Turnigy 650	VM11x7	35	28		18,0	319,0	11,0	C° 20		25	800	1700	8
115	Tenshock 1510A01	107	4650	4S Turnigy 650	GM11x6	33	25	21	22,0	275,0	9,5	C° 20		25	800	1700	5
114	Tenshock 1510A01	107	4650	4S Turnigy 650	GM10x6	25	24	17	23,0	261,0	9,0	C° 20		25	800	1700	5
435	Tenshock 1510A01	107g	4650	4S Turnigy 650	14x10 CN				12	479	16,5	C° 10		C° 25	500	1500	12
85	Tenshock 1510A02	107	3550	4S CNHL 1100	14x10 comp	38	32		16,0	360,0	12,5	C° 10	<30	30	450	1650	11
84	Tenshock 1510A02	107	3550	4S Turnigy 650	14x10 comp	38	30		18,0	330,0	12,0	C° 10	<30	30	450	1650	11
88	Tenshock 1510A02	107	3550	4S Turnigy 650	14x10F	39	31		18,0	305,0	12,0	C° 10	<30	30	450	1650	10
216	Tenshock 1510A02	107	3550	4S Turnigy 650	GM16x10	45	37	32	18,0	348,0	12,0	C° 20	40	20	500	1700	12
197	Tenshock 1510A02	107	3550	4S Turnigy 650	14x10F	34	30		18,0	330,0	11,5	C° 10	40	15	500	1650	13
199	Tenshock 1510A02	107	3550	4S Turnigy 650	13x10C	33	28		17,0	320,0	11,5	C° 10	40	15	500	1650	10
217	Tenshock 1510A02	107	3550	4S Turnigy 650	GM15x8	35	31	25	19,0	305,0	10,5	C° 20	35	20	500	1700	12
200	Tenshock 1510A02	107	3550	4S Turnigy 650	12x10C	28	24	17	21,0	265,0	9,5	C° 10	<30	15	500	1650	5
277	Tenshock 1510A03	107	3950	4S Turnigy 650	Solidtec 1A	59	44	43	11	551	19	-C° 11		25	450	**1250**	15
276	Tenshock 1510A03	107	3950	4S Turnigy 650	GM14x10F	55	41	40	12	493	17	-C° 11		25	450	**1250**	15
59	Tenshock 1510A03	107	3950	4S Turnigy 650	GM15x8			40	14	406	14	-C° 2		25	450	1800	12
60	Tenshock 1510A03	107	3950	4S CLS 900	GM15x8			38	16	360	12,5	-C° 2		25	450	1800	9
57	Tenshock 1510A03	107	3950	4S Turnigy 650	VM12x8		33	28	18	330	11	-C° 2		25	450	1800	12
58	Tenshock 1510A03	107	3950	4S Turnigy 650	GM13x8	36	34	30	23	261	9	-C° 2		25	450	1800	8
56	Tenshock 1510A03	107	3950	4S Turnigy 650	GM10x6				44	130	4,5	-C° 2		25	450	1800	3
218	Tenshock 1510A04	107	5000	4S Turnigy 650	GM12x8	55	44	40	10	600	20	-C° 13		25	450	**1250**	20
218	Tenshock 1510A04	107	5000	4S Turnigy 650	VM12x8				11	522	18	-C° 3		15	450	**1250**	21
53	Tenshock 1510A04	107	5000	4S Turnigy 650	GM14x10F	62	53		12	493	17	-C° 3		25	450	1600	17
52	Tenshock 1510A04	107	5000	4S Turnigy 650	Solidtec 1A	61	51		13	464	16	-C° 3		25	450	1600	15
51	Tenshock 1510A04	107	5000	4S Turnigy 650	VM12x8	50	40	38	14	420	14,5	-C° 3		25	450	1600	18
214	Tenshock 1510A02	107	3550	8S Turnigy 650	GM11x6	40	32	29	9	720	24	-C° 13		25	450	**1300**	6?
279	Tenshock 1510A02	107	3550	6s CNHL 1100	Solidtec A1	59	53	46	9	667	23	-C° 3		25	450	**1350**	19
211	Tenshock 1510A02	107	3550	6s R-line 850	GM12x8	40	34	39	11,0	615,0	20,0	-C° 14		25	450	**1300**	15
213	Tenshock 1510A02	107	3550	8S Turnigy 650	GM9x5	29	22	24	10	600	20	-C° 13		25	450	**1300**	18
212	Tenshock 1510A02	107	3550	6s Tattu 650	GM12x8	38	31	38	12,0	580,0	19,0	-C° 14		30	150	**1250**	19
278	Tenshock 1510A02	107	3550	6s CNHL 1100	VM11x7	37	31	28	11	536	18,5	-C° 3		25	450	**1350**	17
210	Tenshock 1510A02	107	3550	6s R-line 850	GM11x6	34	31	31	15,0	465,0	15,0	-C° 14		25	450	**1300**	14
212	Tenshock 1510A02	107	3550	6s Tattu 650	GM12x8	32	25		15,0	465,0	15,0	-C° 14		20	450	**1250**	9
433	Tenshock 1510A02	107g	3550	6s CNHL 1100	14x10 CN				10	580	20,0	C° 10		C° 25	500	1550	27
448	Tenshock 1515-15	103g	3770	3s Turnigy 650	14x10GM CL	34	28	21	22	261	9,0	C° 10		C° 25	500	1500	7
442	Tenshock 1515-15	103g	3770	3s Turnigy 650	12x8 GM				33	174	6,0	C° 10		C° 25	500	1500	3
449	Tenshock 1515-15	103g	3770	4S Turnigy 650	14x10 GM CL	48	42	38	13	464	16,0	C° 10		C° 25	500	1500	15
447	Tenshock 1515-15	103g	3770	4S Turnigy 650	14x10 CN	46	43	36	13	450	15,5	C° 10		C° 25	500	1500	16
421	Tenshock 1510A01	107g	4650	4S Turnigy 650	11x8 CN	39	35	32	13	435	15,0	C° 10		C° 25	450	1450	8
416	Tenshock 1510A01	107g	4650	4S Turnigy 650	13x9 CN	48	41	38	13	435	15,0	C° 10		C° 25	450	1450	15
446	Tenshock 1515-15	103g	3770	4S Turnigy 650	13x9 CN	40	34	27	13	435	15,0	C° 10		C° 25	500	1500	13
427	Tenshock 1510A02	107g	3550	4S Turnigy 650	14x10 CN	30	28		17	348	12,0	C° 10		C° 25	500	1500	7
443	Tenshock 1515-15	103g	3770	4S Turnigy 650	12x8 GM	39	32	30	17	348	12,0	C° 10		C° 25	500	1500	14
418	Tenshock 1510A01	107g	4650	4S Turnigy 650	12x6 CN	34	29	23	17	334	11,5	C° 10		C° 25	450	1450	13
439	Tenshock 1515-15	103g	3770	4S Turnigy 650	11x8 CN	34	28		17	334	11,5	C° 10		C° 25	500	1500	13
445	Tenshock 1515-15	103g	3770	4S Turnigy 650	12x8 VM	35	30	25	18	319	11,0	C° 10		C° 25	500	1500	14
437	Tenshock 1515-15	103g	3770	4S Turnigy 650	12x6 CN	27	22		22	261	9,0	C° 10		C° 25	500	1500	5
436	Tenshock 1515-15	103g	3770	4S Turnigy 650	10x6 CN	16	15		44	131	4,5	C° 10		C° 25	500	1500	6

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Sec. to 200m	Max m 30sek	Max climb m/s	Temp outsi	Temp moto	Temp batt	Altitude MASL	Weight mod	Zoom m
8	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	VM12x8	61	47		17,0	333,0	11,5	C° 2	Hot	15	400	1750	8
9	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	VM11x7	50	41	39	18,0	319,0	11,0	C° 2	Hot	15	400	1750	6
10	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	RF12x6	53	41		19,0	300,0	10,5	-C° 6	Hot	20	400	1750	12
13	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	VM12x8	57	45		19,0	300,0	10,5	-C° 6	Too hot...	20	400	1750	
7	AXI 2217/12 V2 Long	74g	1380	3s 850 R-line	VM12x8	54	45		21,0	304,0	10,5	C° 2	Hot	15	400	1650	7
11	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	GM11x6	46	37		20,0	290,0	10,0	-C° 6		20	400	1750	10
12	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	VM11x7	45	39		20,0	290,0	10,0	-C° 6		20	400	1750	9
47	AXI 2217/12 V2 Long	74g	1380	3S 1300 25C	RF12x6				22,0	270,0	9,5	C° 15	<30	25	340	**1250**	10
5	AXI 2217/12 V2 Long	74g	1380	3s 850 R-line	VM11x7	47	36		22,0	275,0	9,5	C° 2	?	15	400	1650	8
123	AXI 2217/12 V2 Long	74g	1380	3S 1300 25C	RF12x6				22,0	270,0	9,1	C° 15	<30	25	100	**1250**	5
35	AXI 2217/12 V2 Long	74g	1380	3S 1800 Tattu	GM11X5	30	27	23	31,0	190,0	6,5	-C° 5		20	340	1650	1
266	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9x6	?	?		12,0	513,0	17,2	C° 2	?	25	340	**1250**	
264	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11x6	?	?		12,0	495,0	16,5	C° 2	?	25	340	**1250**	
265	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11x6	?	?		13,0	477,0	16,0	C° 2	?	25	340	**1250**	
108	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM10x6	52	42	40	14,0	420,0	14,5	C° 25		30	800	1650	10
269	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11x6	?	?		14,0	423,0	14,0	C° 2	?	25	340	1650	
268	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9x6	?	?		15,5	390,0	13,0	C° 2	?	25	340	1650	
109	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11x5	57	44	40	16,0	362,0	12,5	C° 25	Hot	30	800	1650	6
112	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11x6	58	50	48	16,5	348,0	12,0	C° 25	Hot	30	800	1650	5
37	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11X6	42	35		17,0	333,0	11,5	-C° 5		20	340	1650	10
36	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM11X5	28	31	30	21,0	305,0	10,5	-C° 5		20	340	1650	4
107	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM10x5	44	37	30	19,0	300,0	10,5	C° 25		30	800	1650	3
113	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9x5	43	36	32	19,0	300,0	10,5	C° 25		30	800	1650	4
40	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9X6	36	30		20,0	290,0	10,0	-C° 5		20	340	1650	12
111	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9x6	44	37	30	20,0	290,0	10,0	C° 25		30	800	1650	6
39	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	RF10X6	38	31		22,0	275,0	9,5	-C° 5		20	340	1650	8
38	AXI 2217/12 V2 Long	74g	1380	4S Turnigy 650	GM9X5	32	27		24,0	245,0	8,5	-C° 5		20	340	1650	9

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Sec. to 200m	Max m 30sek	Max climb m/s	Temp outsi	Temp moto	Temp batt	Altitude MASL	Weight mod	Zoom m
24	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	VM11X7	49	39		14,8	391,5	13,5	-C° 8	<30	25	340	**1250**	15
172	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM12x8		62?		16,0		13,4					1650	
	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	RF11x6,5	50-58	32-35	32-35	19,0	335,0	12,5					1650	
239	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM11x6	47	36		17,0	335,0	12,5	C° 0	50	25	340	1650	9
25	AXI 2220/12 V2 Long	91g	1200	3S R-line 850 95	VM12X8	47	37		17,4	333,5	11,5	-C° 8	<30	25	340	**1250**	6
22	AXI 2220/12 V2 Long	91g	1200	3S R-line 850 95	VM11X7	39	31		18,2	319,0	11,0	-C° 8	<30	25	340	**1250**	9
177	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	Vita11x6		43	32	22,0		11,0					1650	
21	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM9x6	32	27		18,2	319,0	11,0	-C° 8	<30	25	340	**1250**	11

55	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM11x5	36	29		18,0	319,0	11,0	C° 5	<30	25	340	1650	7
174	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	Vita11x6		42		20,0		10,6					1650	
240	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM9x6	33	28		25,0	245,0	10,0	C° 0	40	25	340	1650	10
20	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	GM9x6	34	28		21,0	280,0	10,0	-C° 7	<30	25	340	1650	7
241	AXI 2220/12 V2 Long	91g	1200	3S R-line 850 95	GM13x8	52	42		22,0	270,0	9,5	-C° 5		25	340	1650	8
242	AXI 2220/12 V2 Long	91g	1200	3S R-line 850 95	GM14x7	54	43		23,0	270,0	9,0	-C° 5		25	340	1650	9
176	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	Vita9x6		44	35	23,0		9,0					1650	
175	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	Vita9x6		42		27,0		8,5					1650	
18	AXI 2220/12 V2 Long	91g	1200	3S 1800 Tattu	GM9x6	25	22		26,0	217,0	7,5	-C° 7	<30	25	340	1250	5
245	AXI 2220/12 V2 Long	91g	1200	3S R-line 850 95	GM11x6	31	26		30,0	200,0	6,7	C° 10		15	340	1650	4
19	AXI 2220/12 V2 Long	91g	1200	3S 1800 Tattu	GM9x6	24	21		36,0	159,0	5,5	-C° 7	<30	25	340	1650	4
	AXI 2220/12 V2 Long	91g	1200	4S Turnigy 650	RF10x6	ot tested yet										1650	

Speedtesting forward

	Motor	Weight	KV	Battery	Prop	Max amp	Climb amp	Straight amp	Max range 20(	Weight model	Zoom m	Temp outsi	Temp moto	Temp batt	Altitude start	Altitude MA	Speed
233	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	RF11x6,5	60	45		700,0	1650	18	-C° 2		25	248	340	23ms
232	Dualsky XM3040EG-9	104g	1350	4S Turnigy 650	RF11x6,5	59	45		650	1650	25	-C° 2		25	224	340	20ms
217	Tenshock 1510A02	107	3550	4S Turnigy 650	GM15x8	35	31	25	500	1700	15	C° 20	35	20	210	500	17ms
216	Tenshock 1510A02	107	3550	4S Turnigy 650	GM16x10	45	37	32	580	1700	15	C° 20	40	20	180	500	20ms

Updated 06.05.2020
These are my personal findings and scores are according to what I feel.
Some small adjsutments to spinners might have to be done.
Some props are wider than others. That is mainly not taken into condsideration.
Some combinations could deserve a 7 but I have not opted for a best score.

1 Bad fit and does not fold to fuse
2 Not folding properly
3 Folds but not perfect
4 Folds and fits decent
5 Folds good and fit is good
6 Folds almost perfect and fit is good

30mm Prestige nose - 30mm spinners

Propeller	Spinner								
	VM PRO	VM PRO Yoke fr 32mm	Hyperspinner	GM 28mm yoke	GM 30mm yoke	GM 32mm yoke	GM 34mm yoke	GM comp	GM comp(bigger yoke)
GM9x5	1	2	5	6	6		5		
GM13x8	1	2	5	6	5		5		
GM12x8	1	1	5	6	6		4		
GM11x5	1	1	6	6	6		5		
GM15x8	1	1	5	6	6		5		
GM16x8	1	1	5	6	5		4		
GM14x7	1	1	5	6	6		4		
GM10x6	1	1	6	6	6		5		
GM10x5	1	1	6	6	6		5		
GM9x6	1	1	6	6	6		5		
GM11x6	1	1	6	6	6		5		
RF10x6	4	5	4	5	5		4		
RF12x6	3	5	3	5	5		3		
RF11x6,5	1	5	3	6	6		5		
VM12x8	5	5	5	5	5		4		
VM11x7	5	6	5	6	6		4		
Vita11x6	1	4	5	5	5		4		
Vita9x6	1	2	4	3	3		4		
CAM13x7	1	1	2	4	4		4		
CAM10x6	1	1	3	3	3		4		
CAM11x6	1	1	2	4	4		4		
CAM12x6	1	1	2	4	4		4		
GM14x10F				5	6				
GM 12x10 Comp								4	6
GM 13x10C								4	6
GM 14x10C								4	6
		4	6						

32mm Prestige nose - 32mm spinners

	VM PRO	Hyperspinner	RF Z 23mm yoke	GM 28mm yoke	GM 30mm yoke	GM 32mm yoke	GM 34mm yoke
GM9x5	1	5	2	3	3	6	5
GM13x8	1	5	3	3	6	6	5
GM12x8	1	6	2	3	6	6	5
GM11x5	1	6	2	2	3	6	6
GM15x8	1	6	3	3	6	6	5
GM16x8	1	6	2	3	6	6	6
GM14x7	1	6	2	3	3	6	6
GM10x6	1	6	2	2	3	5	6
GM10x5	1	6	2	3	3	6	6
GM9x6	1	6	2	3	3	5	6
GM11x6	1	6	2	2	3	5	6
RF10x6	5	5	6	3	5	5	4
RF12x6	4	5	6	4	5	5	4
RF11x6,5	2	6	4	3	4	6	6
VM12x8	3	5	2	2	2	3	5
VM11x7	2	5	2	2	2	5	5
Vita11x6	2	5	3	3	6	6	4
Vita9x6	1	6	1	1	2	2	2
CAM13x7	1	4	1	1	3	5	4
CAM10x6	1	3	1	1	3	5	4
CAM11x6	1	4	2	2	4	5	4
CAM12x6	1	5	1	1	5	5	4
GM 14x10F						4	6
RF 10x16						1	
GM 16x10						5	6
Solidtec A1		5					